

(Note: Minor revisions made 9/14/99.)

Bensulide Case #: 2035 AI #: 9801

EPA's QUANTITATIVE USAGE ANALYSIS

Analyst: Alan Halvorson Apr. 2, 1999

Site	Acres (000)	Acres Trtd (000)		% Crop Treated		Total Lb AI (000)		Ave Application Rates			States of Most Usage (with % of total lb ai used by them)
	Grown	Wtd Ave	Est Max	Wtd Ave	Est Max	Wtd Ave	Est Max	lb ai/ A/year	appl/ year	lb ai/ A/appl	
AGRICULTURE --											
Apples	572	0.1	0.2	0.01%	0.04%	0.1	0.2	1.0	1.0	1.0	IL 100%
Beans/Peas, Dry	2,181	10	15	0.5%	0.7%	60	110	6.0	1.5	4.0	TX 100%
Beans/Peas, Green	723	3	10	0.4%	1.3%	5	16	1.7	1.0	1.7	FL 86%
Cantaloupes	113	25	27	22%	24%	36	72	1.5	1.0	1.5	AZ CA TX MD 82%
Carrots	108	2	4	2%	3%	9	17	4.8	1.0	4.8	TX 100%
Celery	35	2	5	4%	13%	6	19	4.0	1.0	4.0	TX 100%
Cole Crops	313	16	30	5%	10%	37	95	2.3	1.0	2.3	CA TX NJ 97%
- Broccoli	111	9	11	8%	10%	11	22	1.3	1.0	1.3	TX 83%
- Cabbage	85	5	7	6%	8%	8	22	1.5	1.0	1.5	TX 88%
Fresh	74	2	6	2%	8%	6	22	3.7	1.0	3.7	TX 100%
- Cauliflower	58	2	4	4%	6%	3	5	1.1	1.0	1.1	TX CA 100%
Corn	71,264	21	42	0.03%	0.06%	84	168	4.0	1.0	4.0	WI 100%
Crops, Other	2,515	0.3	1.0	0.01%	0.04%	1	3	3.2	1.5	2.1	OR OH 90%
Cucumbers, Fresh	52	3	6	7%	12%	17	30	4.8	1.0	4.8	NJ MI 89%
Cucumbers, Process	97	4	7	4%	8%	16	31	4.2	1.0	4.2	WI 81%
Honeydew	27	5	9	18%	34%	16	31	3.4	1.1	3.1	TX AZ 100%
Lettuce	268	19	50	7%	19%	67	152	3.5	1.0	3.5	CA AZ 85%
- Head	204	11	16	6%	8%	58	143	5.1	1.0	5.1	AZ CA 91%
Lots/Farmsteads/etc	24,815	1	2	0.00%	0.01%	-	-	-	1.0	-	-
Melons, Other	0.3	0.1	0.2	29%	58%	0.1	0.3	1.1	1.1	1.0	-
Onions	152	17	34	11%	23%	99	148	5.7	1.0	5.7	ID TX OR 100%
Peanuts	1,610	1.1	2.2	0.07%	0.14%	0.6	1.1	0.5	1.0	0.5	AL 100%
Peppers, Hot	23	1	3	4%	13%	3	8	2.8	1.0	2.8	TX 100%
Peppers, Sweet	77	3	9	4%	12%	29	65	9.2	1.0	9.2	TX NM 100%
Potatoes	1,421	1	2	0.07%	0.14%	4	8	4.0	1.0	4.0	MI 100%
Pumpkins	36	7	13	19%	35%	6	12	0.9	1.0	0.9	IL PA NJ TX IN NY 82%
Soybeans	61,279	6	12	0.01%	0.02%	14	30	2.4	1.0	2.4	IA WI 100%
Squash	53	11	20	21%	38%	12	21	1.0	1.0	1.0	TX NJ CA MA NY MD 79%
Sugar Beets	1,415	2	4	0.2%	0.3%	5	10	2.1	1.0	2.1	OR OH 90%
Sweet Corn	784	1	2	0.1%	0.3%	10	19	9.4	1.0	9.3	MA 89%
Tomatoes, Fresh	116	1	3	0.5%	2.6%	1	4	2.1	1.0	2.1	TX 100%
Watermelons	258	13	22	5%	9%	12	23	0.9	1.0	0.9	MS TX CA CO AZ MD 70%
NON-AGRICULTURE --											
Golf Courses	1,578	<20	<25	<2%	<2%	68	121	>3.4	-	>3.4	-
Lawn Care Operators	31,048	7	13	0.02%	0.04%	11	19	1.5	1.3	1.2	-
- Residential	20,993	-	-	-	-	8	14	-	-	-	-
Landscape Contractors	31,048	<5	<10	<0.02%	<0.04%	9	17	>1.8	-	>1.8	-
Lawn, Homeowners	20,993	-	-	<2%	<2%	<100	<100	-	-	-	-
Nursery	-	-	-	-	-	<1	<2	-	-	-	-
Public/Government	-	-	-	-	-	1	2	-	-	-	-
TOTAL						700	1,350				

COLUMN HEADINGS

Weighted average--the most recent years and more reliable data are weighted more heavily.  
Est Max = Estimated maximum, which is estimated from available data.  
Average application rates are calculated from the weighted averages.

NOTES ON TABLE DATA

Usage data primarily covers 1987 - 1996.

Calculations of the above numbers may not appear to agree because they are displayed as rounded:  
to the nearest 1000 for acres treated or lb. a.i. (Therefore 0 = < 500)  
to the nearest whole percentage point for % of crop treated. (Therefore 0% = < 0.5%)

0\* = Available EPA sources indicate that no usage is observed in the reported data for this site, which implies that there is little or no usage.

A dash (-) indicates that information on this site is NOT available in EPA sources or is insufficient.

\* Other/Crop Groups

Cole Crops include broccoli, Brussels sprouts, cabbage, cauliflower, mustard greens, collards, bok choy, and chard.  
Crops, Other include ornamentals, popcorn, rapeseed/canola, and safflower.  
Melons, Other include muskmelon and winter melon.

SOURCES:

EPA proprietary data, mainly 1987-1996 (with some 1997)  
Kline & Co., Consumer Markets for Pesticides and Fertilizers, 1989, 1993 and 1995  
Kline & Co., Professional Markets for Pesticides and Fertilizers, 1990, 1992 and 1994  
National Center for Food and Agriculture Policy, 1995  
Research Triangle Institute, Results of the 1993 Certified/Commercial Pesticide Applicator Survey  
USDA, 1990-1996

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